

application, the undersigned would very much welcome a telephone call in order to expedite placement of the application into condition for allowance.

Respectfully submitted,

*Robert - Becker*  
Robert W. Becker, Reg. No. 26,255,  
for Applicants

ROBERT W. BECKER & ASSOCIATES  
11896 N. Highway 14, Suite B  
Tijeras, New Mexico 87059

Telephone: (505) 286-3511  
Telefax: (505) 286-3524

TOP SECRET//COMINT

- PCT/US02/33669
30. An apparatus for coating substrates, comprising:  
a substrate holder for holding thereon a substrate in such a way  
that a surface of said substrate that is to be coated is exposed and is  
directed downwardly;  
a means for rotating said substrate holder; and  
a cover that is securable to said substrate holder, wherein said  
cover, together with said substrate holder, are adapted to form a  
sealed chamber for receiving the substrate.
31. An apparatus according to claim 30, wherein a holding  
mechanism is provided on said substrate holder for holding the  
substrate by means of vacuum.
32. An apparatus according to claim 31, wherein a holding  
mechanism is provided on said substrate holder for holding said cover  
by means of vacuum.
33. An apparatus according to claim 32, wherein said holding  
mechanisms for the substrate and for said cover are connected to a  
common vacuum source.
34. An apparatus according to claim 32, wherein said holding  
mechanisms for the substrate and for said cover are adapted to be  
controlled independently of one another.

35. An apparatus according to claim 32, wherein at least one sealing means is provided for delimiting a vacuum region between said substrate holder and said cover.

5 36. An apparatus according to claim 30, wherein said substrate holder is provided with a recess for an at least partial accommodation of the substrate.

10 37. An apparatus according to claim 30, wherein a centering mechanism is provided for a mutual centering of said cover and said substrate holder.

15 38. An apparatus according to claim 37, wherein said centering mechanism is in the form of at least one slanted centering portion on at least one of said substrate holder and said cover.

39. An apparatus according to claim 30, wherein said cover is symmetrical relative to a central axis C thereof.

20 40. An apparatus according to claim 30, wherein a notch is provided in an outer region of a portion of said cover that defines said chamber.

41. An apparatus according to claim 40, wherein said notch tapers outwardly.

25 42. An apparatus according to claim 40, wherein said notch is inclined on a side thereof that faces said substrate holder.

43. An apparatus according to claim 39, wherein said cover is symmetrical relative to a central plane B thereof.

44. An apparatus according to claim 30, wherein a device is provided for turning said cover.

45. An apparatus according to claim 40, wherein a receiver is provided for supporting said cover.

5 46. An apparatus according to claim 45, wherein a device is provided for raising and lowering said receiver.

47. An apparatus according to claim 45, wherein a rinsing and/or drying device is provided for said cover.

10 48. An apparatus according to claim 47, wherein said rinsing and/or drying device is part of said receiver and is provided with at least one nozzle that is directed against at least one of said cover and said notch.

49. An apparatus according to claim 48, wherein at least one nozzle is adapted to be supplied with a rinsing and/or drying fluid.

15 50. An apparatus according to claim 49, wherein said rinsing fluid contains a solvent.

51. A method for coating substrates, including the steps of:  
holding a substrate on a substrate holder in such a way that a surface of the substrate that is to be coated is exposed and is directed downwardly;

20 securing to said substrate holder a cover that together with said substrate holder forms a sealed chamber for receiving the substrate;  
rotating the substrate together with said substrate holder.

52. A method according to claim 51, wherein at least one of the substrate and said cover is held or secured on said substrate holder by means of vacuum.

5 53. A method according to claim 52, which includes the step of centering said cover and said substrate holder relative to one another prior to the holding or securement.

10 54. A method according to claim 51, wherein after said step of rotating the substrate, the securement of said cover is released independent of the holding of the substrate.

15 55. A method according to claim 51, wherein during said step of rotating the substrate a side of said cover that faces away from the substrate is rinsed and/or dried.

56. A method according to claim 51, wherein a rinsing or drying fluid is conveyed against said cover by means of at least one nozzle.

15 57. A method according to claim 51, which includes the step of turning said cover between successive ones of said rotating steps.